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ABSTRACT OF THE DISCLOSURE EXTERNAL PROCESSOR FOR A DISTRIBUTED NETWORK ACCESS SYSTEM

An external processor for a network access system having a programmable access device includes a service controller that provides at least one service for network traffic, a message processor that processes network messages for service processing by the service controller, and a programmable access device controller that programs the programmable access device in response to service controller processing. It is advantageous for the external processor to include primary and secondary service controllers for a particular service so that, if the primary service controller fails, the secondary service controller can provide the particular service for message received from the programmable access device. In preferred embodiments, the service controller further includes a reporting processor that provides an interface through which reporting messages received from the programmable access device can be communicated to the service controller and a signaling controller that transmits signals to configure network hardware to establish requested network connections. The external processor preferably further supports a service policy interface through which the service controller can request policy decisions from a possibly remote policy server.